City/Town: Seekonk Applicant: Seekonk DPW

Form 1

Commonwealth of Massachusetts

## REQUEST FOR A DETERMINATION OF **APPLICABILITY**

Massachusetts Wetlands Protection Act, G. L. c. 131, §40

1.	I, the undersigned, hereby request that the Seekonk Conservation Commission make a determination as to whether the area, described below, or work to be performed on said area, also described below, is subject to the jurisdiction of the Wetlands Protection Act, G. L. c. 131, §40.
	County Street from Fall River Avenue to the Runnins River at the East Providence line.
2.	The area is described as follows: (Use maps or plans, if necessary, to provide a description and the location of the area subject to this request.)
	Location: Street Address: County Street
	Plat No: Lot No: N/A
3.,	The work in said area is described below. (Use additional paper, if necessary, to describe the proposed work)

Installation of drainage system for pollution remediation program. See attached narrative and plan sketches.

### NARRATIVE FOR COUNTY STREET DRAINAGE PROJECT

The County Street drainage project entails the installation of drainage from Fall River Avenue to the Runnins River at the East Providence line. This involves the installation of a catch basin and leaching trench system along County Street, west of Fall River Avenue. Currently, stormwater from the drain system on Fall River Avenue (Route 114) enters catch basins at the intersection of County Street and Fall River Avenue and is routed directly to the Runnins River. In addition to runoff from the paved roadways, the Runnins River at this location is also subject to runoff from a commercial gas station, parking lots, and abutting residences. This added loading is directed to County Street, where it joins with roadway runoff in impacting the Runnins River. Funding of this project is through a grant obtained from Massachusetts Coastal Zone Management.

No work is to be done within the wetland resource areas. Work conducted within the 100 buffer zone will be limited to the installation of the pollution remediation drainage system and associated roadwork. There will be no removal, filling, dredging, or altering of any area subject to the Act.

A description of the project follows:

# 1. Project Overview:

The proposed project involves the remediation of highway stormwater runoff which currently enters the Runnins River unabated. This has resulted in high levels of contaminants within the Runnins River, and the closing of Hundred Acre cove to shell fishing. This application is for the continuation of an ongoing remediation program instituted by the Town of Seekonk. The overall program involves several phases, of which this is Phase IV. Other phases are as follows:

Phase I: This phase has been completed. In 1993, it was discovered by the Seekonk Health Agent that high levels of coliform bacteria were entering the Runnins River via a stormwater drainage system on Monarch Street in Seekonk. A program of dye and smoke testing was initiated in order to find the source of this pollution. It was discovered that a goat farm located on Warren Avenue had an underground pipe system which was connected to the drains on Monarch Street. The practice of burying animal manure on the property had resulted in the pollution entering the pipe system and traveling through the municipal drains to the Runnins River. As a result of this study, the existing manure was excavated and the underground pipe at this location was disconnected from the municipal drain. Subsequent testing verified a major reduction in pollutant loading.

Phase II: This phase has been awarded ISTEA Transportation Enhancement Program funding for the installation of stormwater pollutant remediation measures on Mead and Mink Streets in Seekonk. The project is currently under final design, and has been approved for construction by the Massachusetts Highway Department. Stormwater remediation is by means of leaching trenches and stormwater treatment chambers. It will be constructed in the spring of 1997.

Phase III: This phase, located on School Street, was completed in 1996 and is currently treating all stormwater from this roadway area. It is a continuation of the stormwater pollutant remediation program being constructed under Phase II. A catch basin and leaching trench system was installed to intercept and treat stormwater previously discharged directly into the Runnins River.

## 2. Construction of the Project:

The design and construction of this project was done in accordance with Best Management Practices as detailed in <u>Controlling Urban Runoff</u> and <u>A Current Assessment of Urban Best Management Practices</u>, published by the Metropolitan Washington Council of Governments. Plans and specifications are prepared for this work, and construction methods and materials will be done under the direct supervision of the Town of Seekonk and it's Consulting Engineer.

#### 3. Summary of Project:

This project will involve the construction of a stormwater pollutant remediation system along the western portion of County Street. At the current time, all stormwater and snow melt enters the Runnins River by way of a poorly functioning, under designed, and non-BMP (Best Management Practice) drainage pipe systems. In some cases, there is no drainage system at all and stormwater runs directly into the street from the roadway.

Under this proposal, a system of leaching catch basins will be installed to intercept stormwater runoff and allow for filtration prior to discharge into the Runnins River. This system is intended to treat the "first flush" of stormwater (see Abatement Method, next section).

#### 4. Abatement Method and Best Management Practice:

Roadway runoff collects contaminants and deposits them in rivers, ponds, stream, and coastal water bodies. Such runoff contributes sediment, bacteria, heavy metals, and petroleum hydrocarbons to the waterway. Since runoff currently enters the Runnins River unabated, all pollutants transported via roadway runoff are deposited into the waterway.

The initial runoff or "first flush" (usually the first inch of stormwater runoff or less) generated from storm events contains the majority of pollutants associated with residential watersheds. Instead of discharging pollutants directly into the Runnins River, the mitigation project will incorporate the use of leaching trench systems to treat the "first flush". Individual leaching chambers will be placed under the road where it passes over the Runnins River. This project is expected to reduce the amount of pollutants entering the Runnins River carried by stormwater runoff and snow melt.

At each location, road runoff will be diverted into a stormwater drain inlet with a settling basin to allow sediments and other solids to settle out. Storm drain inlets will be installed during the construction phase of the project. From the storm drain inlet, the stormwater is then piped under the road surface into the leaching trenches.

#### 5. Project administration:

This project will be conducted under the jurisdiction of the Seekonk Conservation Commission, the Seekonk Department of Public Works, and Massachusetts Highway Department, and Massachusetts Coastal Zone Management.

#### 6. Operation and Maintenance:

The system will be maintained by the Town of Seekonk Department of Public Works. The Town appropriates funds annually for the maintenance of municipal drainage systems. In addition, the Town has a program of street sweeping, which will aid in reducing the amount of sediment washed into the structures.

#### 7. **Monitoring:**

The Department of Public Works regularly inspects the drainage systems throughout the town. The structures at this location will become part of that policy.

There is an ongoing sampling program being conducted along the Runnins River. Water quality testing for fecal coliform, heavy metals, and other pollutants is conducted. With the base readings currently available, the success of the proposed structural measures will be readily attainable.

There are several groups associated with the Runnins River. Among these are the Conservation Commissions of East Providence, RI and Seekonk, MA, the Seekonk Board of Health, the New England Interstate Water Pollution Control Commission, and the Pokanoket Watershed Alliance. All have in the past and will continue in the future to conduct water sampling of this resource. Furthermore, the Town of Seekonk maintains an outside consulting firm to conduct engineering evaluations. The point of contact for the Town of Seekonk with respect to the various agencies involved in the Pollution Remediation of the Runnins River is Harold E. Chenevert, Jr. Mr. Chenevert is the full time Health Agent for the Town of Seekonk.